REMARKS

Reconsideration of the present application is respectfully requested. Claims 1-5, 7, 9-12, and 25-33 remain pending in the application.

Claims 1-5, 7, 25-29, and 32-33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McArthur, U.S. Patent No. 5,805,806 ("McArthur"). Claims 9-12 and 30-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over McArthur in view of Terry et al., U.S. Patent No. 5,499,047 ("Terry"). Claims 1-5, 7, 25 and 27-29 stand rejected as being unpatentable over Williams, Jr. U.S. Patent No. 6,202,211 ("Williams") in view of McArthur.

No claims have been amended, added, or cancelled in this response.

Rejections Under 35 U.S.C. §103(a)

McArthur

The Examiner rejected claims 1-5, 7, 25-29 and 32-33 under 35 U.S.C. §103(a) as being unpatentable over McArthur, U.S. Patent No. 5,805,806 ("McArthur"). Applicant respectfully submits that the present claims are patentable over McArthur.

McArthur teaches a method "to distribute and display locally generated video on any display device in a local area network (LAN)." (McArthur, col. 1, lines 56-59). Applicant respectfully submits that McArthur does not teach or suggest every element of claim 1. Claim 1 recites:

> A digital coaxial cable LAN for communicating data between clients of the cable LAN, the cable LAN comprising:
>
> a plurality of clients;

a plurality of universal client interface adapters, one universal client interface adapter in communication with at least one client and in communication with at least one other universal client interface adapter;

at least one coaxial cable coupled between a pair of universal client interface adapters, the at least one coaxial cable having an operating frequency spectrum, the operating frequency spectrum having at least a first portion and a second portion, the second portion operating at a frequency greater than a signal cut-off frequency defined for conventional coaxial cable services; and

at least one carrier modulated digital signal having a signal operating frequency that occupies the second portion of the operating frequency spectrum of the coaxial cable, the at least one carrier modulated digital signal transmitted in the coaxial cable coupled between the pair of universal client interface adapters. (Claim 1, emphasis added).

In the present Office Action, the Examiner has stated that "it is obvious that the signals transmitted in local video channels are carrier modulated digital signals in order to improve data transmission efficiency." (Office Action, p. 3-4). Applicant respectfully submits, however, that McArthur fails to teach a carrier modulated digital signal as claimed in claim 1. Instead, McArthur teaches away from the use of a carrier modulated digital signal because the video signal is output from the PC in National Television System Committee (NTSC) format, which is a color analog TV standard. (McArthur, col. 4, lines 52-55). McArthur further discloses that "LAN/video interface 30 is designed to couple a PC having capability to generate composite video output to the network." (McArthur, col. 8, ll. 6-10). Composite video is an analog format signal. McArthur overlays the local video channels in analog format onto the existing cable channels 118-125. (McArthur, Tables 1 and 2). Although McArthur discloses that "video information can be modulated onto any of the eight local video channels SN1 through SN8," the modulated video information is not a "carrier modulated digital signal" as claimed, since McArthur's local channels consist of modulated composite analog signals.

Furthermore, McArthur fails to teach a "carrier modulated digital signal having a signal operating frequency that occupies the second portion of the operating frequency spectrum of the coaxial cable." In the present Office Action, the Examiner has equated the frequency band used by McArthur's local video channels with the claimed second portion of the operating frequency spectrum. (Office Action, p.1) Claim 1 includes the limitation that the second portion operates "at a frequency greater than a signal cut-off frequency defined for conventional coaxial cable services." As defined in Applicant's Specification at page 10, lines 8-9, "0 – 950 MHz is where conventional cable TV, digital cable TV, and cable modem service are offered." Additionally, McArthur discloses that "cable television services generally occupy a range of frequencies from 50 to 800 MHz." (McArthur, col. 4, ll. 16-17). McArthur teaches away from the claimed limitation since McArthur discloses that "the frequency range from 750 to 800 MHz is used to implement eight local video channels." As a result, McArthur's "frequency allocation scheme sacrifices several of the highest cable television channels are sacrificed in favor of local video." (McArthur, col. 4, lines 56-58). Thus, McArthur discloses that the local video channels operate within frequency ranges defined for conventional cable television services, and does not teach or suggest a carrier modulated digital signal operating "at a frequency greater than a signal cut-off frequency defined for conventional coaxial cable services."

Accordingly, it is respectfully submitted that claim 1 and claims 2-5, 7, and 27 that depend from claim 1, are patentable over McArthur for at least the reasons discussed above.

Independent claims 25 and 28 include similar limitations as claim 1, and are patentable over McArthur for at least the same reasons discussed above with respect to claim 1. Accordingly, claims 26, 29 and 32-33 which depend from independent claims 25 and 28, are also patentable over McArthur.

Therefore, Applicant respectfully requests the withdrawal of the rejection of the claims under 35 U.S.C. §103(a).

McArthur in view of Terry

The Examiner rejected claims 9-12 and 30-31 under 35 U.S.C. §103(a) as being unpatentable over McArthur in view of Terry et al., U.S. Patent No. 5,499,047 ("Terry"). Applicant submits that the present claims are patentable over McArthur in view of Terry.

In the present Office Action, the Examiner has stated that:

> Terry discloses the "signal operating frequency" range from 1150 to 1350 MHz...Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McArthur to utilize the "operating frequency" greater than approximately 950 MHz in order to increase the bandwidth thereby allowing more data transmitted in the cable. (Office Action, p. 8).

Applicant respectfully submits that there is no suggestion or motivation to combine McArthur with Terry as proposed by the Examiner. Applicant submits that the proposed combination of McArthur with Terry would render McArthur unsatisfactory for its intended purpose. MPEP 2143.01 states that "if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." (MPEP 2143.01, citing *In re Gordon*, 733 F.2d 900, 221 USPQ1125 (Fed. Cir. 1984)).

McArthur teaches that "cable television services generally occupy a range of frequencies from 50 to 800 MHz... In accordance with the present invention, the range of frequencies from 0 to 50 MHz is used for a local baseband (unmodulated) digital network." (McArthur, col. 4, ll. 16-23). McArthur also teaches that "low-pass filters... extract the baseband digital signals." (McArthur, col. 7, ll. 31-33). Additionally, McArthur teaches that "low-pass filter 122 allows only frequencies from 0 to 50 MHz to pass, thereby isolating the LAN transceiver 128 from cable television and local video signals." (McArthur, col. 8, ll. 38-41).

Terry teaches a "conventional cable television distribution network... which is supplemented with an additional bi-directional transmission capability." (Terry, col. 4, ll. 36-40). Terry also teaches that "each FTU 26 (fiber termination unit)...serves to supply to the coaxial cable...digital signals at frequencies above those of the analog television signals already carried by the cable." (Terry, col. 4, ll. 47-54). Additionally, the Examiner has referenced col. 5, ll. 55-60 of Terry:

> For the upstream direction of transmission, control signals can be carried in the relatively low frequency range from 5 to 30 MHz, but preferably control signals and possibly other data are carried in a QPSK (quadrature phase shift keyed) channel providing an upstream bit rate of 300 Mb/s in a frequency range from 1150 to 1350 MHz, as shown in FIG. 2. (Terry, col. 5, ll. 55-60).

The combination of McArthur's teaching that "low-pass filters extract the baseband digital signals", with Terry's teaching of "digital signals at frequencies above those of the analog television signals already carried by the cable," would render McArthur unsatisfactory for its intended purpose of using the "range of frequencies from 0 to 50 MHz...for a local baseband (unmodulated) digital network." Additionally, the low-pass filters taught by McArthur would filter out the high frequency digital signals

(e.g. 1150 to 1350 MHz) taught by Terry. Therefore, Applicant submits that there is no suggestion or motivation to combine the teachings of McArthur with those of Terry.

Accordingly, claims 9-12 and 30-31 are patentable over the combination of McArthur and Terry for at least the reasons discussed above. Therefore, Applicant respectfully requests the withdrawal of the rejection of the claims under 35 U.S.C. §103(a).

Williams in view of McArthur

The Examiner rejected claims 1-5, 7, 25 and 27-29 under 35 U.S.C. §103(a) as being unpatentable over Williams, Jr., U.S. Patent No. 6,202,211 ("Williams") in view of McArthur. Applicant submits that the present claims are patentable over Williams in view of McArthur.

Claim 1 includes the limitation of "the second portion operating at a frequency greater than a signal cut-off frequency defined for conventional coaxial cable services." In the present Office Action, the Examiner has admitted that "Williams does not specifically disclose the second portion operating at a frequency greater than a signal cut-off frequency defined for external television signal." (Office Action, p. 11). As discussed above, McArthur also does not teach or suggest the limitation of "the second portion operating at a frequency greater than a signal cut-off frequency defined for conventional coaxial cable services." Therefore, the combination of Williams and McArthur does not teach or suggest every limitation of claim 1.

Accordingly, it is respectfully submitted that claim 1 and claims 2-5, 7, and 27 that depend from claim 1, are patentable over McArthur for at least the reasons discussed above.

Independent claims 25 and 28 include similar limitations as claim 1, and are patentable over the combination of Williams and McArthur for at least the same reasons discussed above with respect to claim 1. Accordingly, claim 29 that depends from claim 28 is also patentable over the combination of Williams and McArthur for at least the reasons discussed above.

Therefore, Applicant respectfully requests the withdrawal of the rejection of the claims under 35 U.S.C. §103(a).

Conclusion

Applicant respectfully submits that in view of the discussion set forth herein, the applicable rejections have been overcome and the pending claims are in condition for allowance.

If the Examiner finds any remaining impediment to the prompt allowance of these claims that could be clarified with a telephone conference, the Examiner is respectfully requested to contact J. Scott Heileson at (408) 720-8300.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

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